

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/707,975  
ATTORNEY DOCKET NO. Q61361

**REMARKS**

Applicant thanks the Patent Office for acknowledging Applicant's claim to foreign priority, and for indicating that the certified copy of the priority document, European Patent Application No. 99402898.3 dated November 19, 1999, has been made of record in the file.

Applicant thanks the Patent Office for initialing the references listed on the PTO-1449 form submitted with the Information Disclosure Statement filed on November 8, 2000, thereby confirming that the listed references have been considered.

Applicant herein editorially amends the Abstract of the Disclosure to remove reference callouts, to correct language usage and to conform it to U.S. practice. No new matter has been added.

Claims 1-27 have been examined on their merits.

The Patent Office objects to claims 7, 14, 15 and 24 as being dependent upon a rejected base claim. Applicant thanks the Patent Office for indicating that claims 7, 14, 15 and 24 would be allowed if rewritten in independent form. Applicant herein cancels claims 1, 8 and 17 without prejudice and/or disclaimer, and rewrites claims 5, 12 and 22 in independent form with the recitations of cancelled claims 1, 8 and 17, respectively. Claim 15 has been rewritten in independent form as new independent claim 28. No new matter has been added. Entry and consideration of the new claim 28 is respectfully requested.

Applicant herein editorially amends claims 2-4, 6, 9-11, 13, 15, 16, 18-21, 23 and 25-27 to correct dependencies, to remove callout references and to correct language. The amendments to claims 2-4, 6, 9-11, 13, 15, 16, 18-21, 23 and 25-27 were made merely to more accurately

claim the present invention and do not narrow the literal scope of the claims and thus do not implicate an estoppel in the application of the doctrine of equivalents. The amendments to claims 2-4, 6, 9-11, 13, 15, 16, 18-21, 23 and 25-27 were not made for reasons of patentability.

Claims 2-7, 9-16 and 18-28 are all the claims presently pending in the application.

1. Claims 16 and 26 stand rejected under 35 U.S.C. § 112 (2<sup>nd</sup> para.) as allegedly being indefinite. Applicant herein amends claims 16 and 26 to remove the “preferably” range limitation. Applicant submits that the § 112 (2<sup>nd</sup> para.) rejection of claims 16 and 26 has been overcome, and respectfully requests withdrawal of same.

2. Claims 1, 2, 4, 6, 8, 9, 11, 13, 17-19, 21 and 23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Applicant’s Admitted Prior Art (AAPA) in view of Freimanis (U.S. Patent No. 4,042,786). The rejection of claims 1, 8 and 17 is now moot due to their cancellation. Applicant respectfully traverses the rejection of claims 2, 4, 6, 9, 11, 13, 18, 19, 21 and 23 for at least the reasons discussed below.

Claims 2, 4 and 6 depend from newly independent claim 5, and therefore include all the recitations of claim 5.

With respect to claim 5, the combination of AAPA and Freimanis fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Applicant notes that claim 5 was not rejected over a combination of AAPA and Freimanis. Furthermore, neither AAPA nor

Freimanis excludes any detectable components from the frequency band for digital data signals. For example, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the two references. *In re Dembiczak* and *In re Zurko* require the Patent Office to provide particularized facts on the record as to why one of skill would be motivated to combine the two references. Without a motivation to combine, a rejection based on a *prima facie* case of obviousness is improper. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999). The Patent Office must make specific factual findings with respect to the motivation to combine references. *In re Lee*, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002). Both the AAPA and Freimanis lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA and Freimanis fails to teach or suggest all of the claimed elements as arranged in claim 5. Therefore, the combination of AAPA and Freimanis clearly cannot render the present invention obvious as

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recited in claim 5. Thus, Applicants submits that claim 5 is allowable, and further submit that claims 2, 4 and 6 are allowable as well, at least by virtue of their dependency from claim 5. Applicant respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 2, 4 and 6.

Claims 9, 11 and 13 depend from newly independent claim 12, and therefore include all the recitations of claim 12.

With respect to claim 12, the combination of AAPA and Freimanis fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Applicant notes that claim 12 was not rejected over a combination of AAPA and Freimanis. Furthermore, neither AAPA nor Freimanis excludes any detectable components from the frequency band for digital data signals. For at least the same reasons as discussed above with respect to claim 5 (herein incorporated by reference), Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the two references. As noted above with respect to claim 5, both the AAPA and Freimanis lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA and Freimanis fails to teach or suggest all of the claimed elements as arranged in claim 12. Therefore, the combination of AAPA and Freimanis clearly cannot render the present invention obvious as recited in claim 12. Thus, Applicants submits that claim 12 is allowable, and further submit that claims 9, 11 and 13 are allowable as well, at least by virtue of their dependency from claim 12. Applicant respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 9, 11 and 13.

Claims 18, 19, 21 and 23 depend from newly independent claim 22, and therefore include all the recitations of claim 22.

With respect to claim 22, the combination of AAPA and Freimanis fails to teach or suggest at least a ringing indication signal that lacks detectable components in the frequency band for digital data signals. Applicant notes that claim 22 was not rejected over a combination of AAPA and Freimanis. As noted above with respect to claim 5, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the two references. As noted above with respect to claim 5, both the AAPA and Freimanis lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band for digital data signals. Thus, Applicant submits

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that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA and Freimanis fails to teach or suggest all of the claimed elements as arranged in claim 22. Therefore, the combination of AAPA and Freimanis clearly cannot render the present invention obvious as recited in claim 22. Thus, Applicants submits that claim 22 is allowable, and further submit that claims 18, 19, 21 and 23 are allowable as well, at least by virtue of their dependency from claim 22. Applicant respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 18, 19, 21 and 23.

3. Claims 3, 10 and 20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Freimanis and in further view of Malerba *et al.* (U.S. Patent No. 4,189,626). Applicant respectfully traverses the rejection of claims 3, 10 and 20 for at least the reasons discussed below.

Claims 3 depends from newly independent claim 5, and therefore includes all the recitations of claim 5.

With respect to claim 3, the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals, as recited in claim 5 and included via dependency in claim 3. Applicant notes that claim 5 was not rejected over a combination of AAPA, Freimanis and Malerba *et al.* Furthermore, neither AAPA,

Freimanis nor Malerba *et al.* excludes any detectable components from the frequency band for digital data signals. As noted above with respect to claim 5, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Malerba *et al.* discloses receiving ringing signals of nearly 100 volts, which would have the same unacceptable harmonics as the signal of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Malerba *et al.* all lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 5, and included in claim 3 via dependency. Thus, Applicant submits that claim 3 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 3.

Claim 10 depends from newly independent claim 12, and therefore includes all the recitations of claim 12.

With respect to claim 10, the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals, as recited in claim 12 and included via dependency in claim 10. Applicant notes that claim 10 was not rejected over a combination of AAPA, Freimanis and Malerba *et al.* Furthermore, neither AAPA, Freimanis nor Malerba *et al.* excludes any detectable components from the frequency band for digital data signals. For at least the same reasons as discussed above with respect to claim 12 (herein incorporated by reference), Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the two references. As noted above with respect to claim 3, AAPA, Freimanis and Malerba *et al.* all lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 12, and included in claim 10 via dependency. Thus, Applicant submits that claim 10 is



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allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 10.

Claim 20 depends from newly independent claim 22, and therefore includes all the recitations of claim 22.

With respect to claim 22, the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals, as recited in claim 20 and included via dependency in claim 22. Applicant notes that claim 20 was not rejected over a combination of AAPA, Freimanis and Malerba *et al.* Furthermore, neither AAPA, Freimanis nor Malerba *et al.* excludes any detectable components from the frequency band for digital data signals. As noted above with respect to claim 22, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Malerba *et al.* discloses receiving ringing signals of nearly 100 volts, which would have the same unacceptable harmonics as the signal of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Malerba *et al.* all lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot

fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Malerba *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 22, and included in claim 20 via dependency. Thus, Applicant submits that claim 20 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 20.

4. Claims 5, 12 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Freimanis and in further view of Balachandran *et al.* (U.S. Patent No. 6,324,268). Applicant respectfully traverses the rejection of claims 5, 12 and 22 for at least the reasons discussed below.

With respect to claim 5, the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Neither AAPA, Freimanis nor Balachandran *et al.* excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 5, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Balachandran *et al.* disclose a conventional ringing signal, which would have the same unacceptable harmonics as the signal of Freimanis. The Patent Office maintains that

Balachandran *et al.* disclose increasing the start frequency band when a ring tone is detected and restricting the digital data band to avoid components of the ringing indication. *See* May 5, 2004 Office Action, pg. 8. However, the frequency restriction does not occur until after the ringing signal is received (“If the ring tone is present (block 84), then the voice communication processor 66 notifies the control processor....”). A disadvantageous consequence of Balachandran *et al.* is a loss of bandwidth for the digital data service resulting in lower DSL bitrates, and the need to retrain the DSL connection that implies temporary interruption of the digital data service. These disadvantages are absent in the invention recited in claim 5, wherein, instead of a traditional harmful ringing signal, a ringing indication signal that lacks any harmonic distortion is detectable in the frequency band intended for digital data service is sent. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Balachandran *et al.* all lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest all of the claimed elements as

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arranged in claim 5. Thus, Applicant submits that claim 5 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 5.

With respect to claim 12, the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Neither AAPA, Freimanis nor Balachandran *et al.* excludes any detectable components from the frequency band for digital data signals. For at least the same reasons as discussed above with respect to claim 12 (herein incorporated by reference), Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Balachandran *et al.* all lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 12. Thus, Applicant submits that claim 12 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 12.

With respect to claim 22, the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest at least a ringing indication signal that lacks detectable components in the frequency band for digital data signals. Neither AAPA, Freimanis nor Balachandran *et al.* excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 22, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Balachandran *et al.* disclose a conventional ringing signal, which would have the same unacceptable harmonics as the signal of Freimanis. The Patent Office maintains that Balachandran *et al.* disclose increasing the start frequency band when a ring tone is detected and restricting the digital data band to avoid components of the ringing indication. *See* May 5, 2004 Office Action, pg. 8. However, the frequency restriction does not occur until after the ringing signal is received (“If the ring tone is present (block 84), then the voice communication processor 66 notifies the control processor....”). A disadvantageous consequence of Balachandran *et al.* is a loss of bandwidth for the digital data service resulting in lower DSL bitrates, and the need to retrain the DSL connection that implies temporary interruption of the digital data service. These disadvantages are absent in the invention recited in claim 5, wherein, instead of a traditional harmful ringing signal, a ringing indication signal that lacks any harmonic distortion is detectable in the frequency band intended for digital data service is sent. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Balachandran *et al.* all lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Balachandran *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 22. Thus, Applicant submits that claim 22 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 22.

5. Claims 16 and 26 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Freimanis and in further view of Williamson *et al.* (U.S. Patent No. 6,477,249) and Russell *et al.* (U.S. Patent No. 5,757,803). Applicant respectfully traverses the rejection of claims 16 and 26 for at least the reasons discussed below.

Claims 16 depends from newly independent claim 12, and therefore includes all the recitations of claim 12.

With respect to claim 16, the combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* fails to teach or suggest at least a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals, as recited in claim 12 and included via dependency in claim 16. Applicant notes

that claim 12 was not rejected over a combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* Furthermore, neither AAPA, Freimanis, Williamson *et al.* nor Russell *et al.* excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 12, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the four references. The AAPA, Freimanis, Williamson *et al.* and Russell *et al.* all lack any teaching about the desirability of a ringing indication signal that has a voltage amplitude less than 30 V RMS and lacks detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 12, and included in claim 16 via dependency. Thus, Applicant submits that claim 16 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 16.

Claim 26 depends from newly independent claim 22, and therefore includes all the recitations of claim 22.

With respect to claim 26, the combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* fails to teach or suggest at least a ringing indication signal that lacks detectable components in the frequency band for digital data signals, as recited in claim 22 and included via dependency in claim 26. Applicant notes that claim 22 was not rejected over a combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* Furthermore, neither AAPA, Freimanis, Williamson *et al.* nor Russell *et al.* excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 22, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.,* col. 2, lines 31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the four references. The AAPA, Freimanis, Williamson *et al.* and Russell *et al.* all lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis, Williamson *et al.* and Russell *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 22, and included in claim 26 via dependency. Thus, Applicant



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submits that claim 26 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 26.

6. Claim 25 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Freimanis and in further view of Birck (U.S. Patent No. 3,591,728). Applicant respectfully traverses the rejection of claim 25 for at least the reasons discussed below.

Claim 25 depends from newly independent claim 22, and therefore includes all the recitations of claim 22.

With respect to claim 25, the combination of AAPA, Freimanis and Birck fails to teach or suggest at least a ringing indication signal that lacks detectable components in the frequency band for digital data signals, as recited in claim 22 and included via dependency in claim 25. Applicant notes that claim 25 was not rejected over a combination of AAPA, Freimanis and Birck. Furthermore, neither AAPA, Freimanis and Birck excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 22, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines 31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Birck all lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band

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for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Birck fails to teach or suggest all of the claimed elements as arranged in claim 22, and included in claim 25 via dependency. Thus, Applicant submits that claim 25 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 25.

7. Claim 27 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Freimanis and in further view of Tate *et al.* (U.S. Patent No. 6,400,803). Applicant respectfully traverses the rejection of claim 27 for at least the reasons discussed below.

Claim 27 depends from newly independent claim 22, and therefore includes all the recitations of claim 22.

With respect to claim 27, the combination of AAPA, Freimanis and Tate *et al.* fails to teach or suggest at least a ringing indication signal that lacks detectable components in the frequency band for digital data signals, as recited in claim 22 and included via dependency in claim 27. Applicant notes that claim 22 was not rejected over a combination of AAPA, Freimanis and Tate *et al.* Furthermore, neither AAPA, Freimanis and Tate *et al.* excludes any detectable components from the frequency band for digital data signals. As discussed previously with respect to claim 22, the signal in Freimanis is a conventional, high-voltage ringing signal with unavoidable disturbing harmonics in the digital data frequency band. *See, e.g.*, col. 2, lines

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31-35 of Freimanis. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Furthermore, Applicant submits that one of skill in the art would not be motivated to combine the three references. The AAPA, Freimanis and Tate *et al.* all lack any teaching about the desirability of a ringing indication signal lacking detectable components in the frequency band for digital data signals. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Based on the foregoing reasons, Applicant submits that the combination of AAPA, Freimanis and Tate *et al.* fails to teach or suggest all of the claimed elements as arranged in claim 22, and included in claim 27 via dependency. Thus, Applicant submits that claim 27 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 27.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

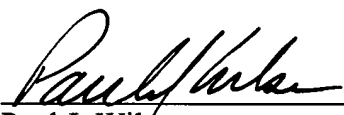
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